

does not believe that the rejection has been overcome, she is requested to contact the undersigned at the number listed below to discuss any outstanding issues.

Claims 1-14

Claim 1 recites a method for managing access to a shared resource. The method includes acts of: (a) in response to a non-media access request by a first device to a logical device for which the first device has no data access privileges, determining whether the first device is authorized to have non-media access to the logical device, and (b) authorizing the non-media access request when it is determined that the first device is authorized to have non-media access to the logical device.

It should be appreciated that having authorization to perform a non-media access typically requires a higher level of privilege than performing a data access, such that in most systems any device having privileges to perform a non-media access request also has data access privileges. However, as discussed in the prior response, Applicants discovered that it would be advantageous in some circumstances to provide a device with non-media access privileges to a logical device to which it does not even have data access privileges.

O'Hare simply does not teach or suggest the providing of non-media access to a logical device for a device that does not have data access privileges to that logical device. As discussed in more detail below, the Office Action does not point to any explicit disclosure of this in O'Hare. Therefore, the rejection would only be proper if such a teaching were inherent in O'Hare. However, the threshold for establishing inherency is extremely high, and Applicants respectfully assert that the Office Action fails to carry this burden.

To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is ***necessarily present*** in the thing described in the reference and that it would be so recognized by persons of ordinary skill.

Inherency, however, may not be established by probabilities or possibilities.

The mere fact that a certain thing may result from a given set of circumstances is not sufficient. (Emphasis added.) MPEP §2112(IV)

The Office Action asserts that O'Hare discloses a non-media access request (i.e., a system call) to a logical device for which the requesting device has no data access privileges (i.e., read or

write access) at column 10, lines 13-14 and column 4, lines 31-36, stating “this condition occurs when access control of the system includes read and write operations, along with system calls [C2, L3-6] and when system calls are allowed and read/write operations are not allowed from the first device to the logical device.” (Office Action, page 2)(emphasis in original). The Office Action further asserts that authorizing a non-media access request from a first device which has no data access privileges is disclosed at column 2, lines 25-30 and column 14, lines 19-22. (Office Action, page 3).

The cited sections clearly do not explicitly describe the granting of non-media access to a device not having data access privileges. In this respect, the disclosure at column 10, lines 13-14 merely describes access control that controls read and write operations and system calls; the disclosure at column 4, lines 31-36 describes allowing restricted access according to a matrix; the disclosure at column 2, lines 25-30 describes various types of access; and the disclosure at column 14, lines 19-22 describes the granting of an access request. There is simply nothing in any of these sections of O’Hare or elsewhere to support the “condition” referenced in the above-quoted portion of the Office Action wherein system calls are allowed but read/write operations are not from a first device to a logical device.

The Examiner’s view appears to be that the system of O’Hare *could* conceivably be configured so that non-media access *could* be granted to a device that does not have data access privileges. Even if this were true (which Applicants do not concede), much more is required to sustain the rejection of claim 1 under §102. As stated above, speculation about such a possibility is not enough for an inherency rejection, which is what the Examiner is necessarily relying on in view of the lack of any explicit disclosure, as inherency “may not be established by probabilities or possibilities” or “the mere fact that a certain thing may result.” (MPEP §2112(IV)). Rather, the rejection of claim 1 would only be proper if the performance of the method recited therein is “necessarily present” in O’Hare. (MPEP §2112(IV)). This is certainly not the case, as O’Hare is entirely consistent with a system that is configured so that non-media access privileges are never granted to a device that does not also have data access privileges to the particular volume.

In view of the foregoing, it is respectfully asserted that the rejection of claims 1-14 under §102 as purportedly being anticipated by O’Hare is improper, and should be withdrawn.

Dependent claims 2-14 depend from claim 1 and are patentable for at least the same reasons. Thus, additional patentability of these claims is not argued herein, as it is unnecessary at this time. However, Applicants would like to point out the impropriety of the rejection of claim 5 as an example, as it further demonstrates what Applicants respectfully assert is an improper use of an inherency rejection.

Claim 5 specifically recites the non-media access request as being an availability request to determine an availability of the logical device. The Office Action asserts that O'Hare discloses system calls that control configuration and operation of the storage system 22, and that such a system "intrinsically" includes an availability request. (Office Action, page 3). Again, this is assumed to be an inherency rejection, as O'Hare clearly does not explicitly disclose an availability request, (see e.g., column 2, lines 24-25 which recite a number of system accesses and does not list an availability request). It is respectfully asserted that the high standard necessary to sustain an inherency rejection is simply not met for this limitation in claim 5.

Claims 15-59

Each of claims 15-59 (via independent claims 15, 28, and 48) also recites a limitation of, for a first device that does not have data access privileges to a logical device or a logical volume, determining, "based, at least in part on an identity of the first device, whether the first device is authorized to have non-media access" to the logical device or logical volume. As should be clear from the foregoing, O'Hare does not disclose or suggest such a limitation. Accordingly, it is respectfully requested that the rejection of claims 15-59 under §102 as purportedly being anticipated by O'Hare be withdrawn.

Claims 43-47

Claim 43 is directed to a computer readable medium comprising a data structure relating to access management by a plurality of network devices to data stored on a plurality of logical devices. The data structure includes a plurality of records, each corresponding one of the network devices, and a first record corresponding to a first of the network devices and including configuration information identifying each of the logical devices to which data access by the first network device

is authorized. The first record further includes visibility information identifying whether the first network device is authorized to have non-media access to a first of the plurality of logical devices when the configuration information corresponding to the first network device identifies that no data access to the first logical device from the first network device is authorized.

As should be appreciated from the foregoing, there is no teaching or suggestion in O'Hare of providing a data structure relating to access management for network devices wherein a record in the data structure includes visibility information identifying whether a first network device that has no data access privileges to a first logical device is authorized to have non-media access to the first logical device. Accordingly, it is respectfully requested that the rejection of claim 43 under 35 U.S.C. §102(e) be withdrawn.

Claims 44-47 depend from claim 43 and are patentable for at least the same reasons. Accordingly, it is respectfully requested that the rejection of claims 44-47 under 35 U.S.C. §102(e) be withdrawn.

Claims 60-66

Claim 60 is directed to a storage system comprising a plurality of storage devices that store a plurality of logical volumes; a data structure to store configuration information; and a filter to selectively forward non-media access requests from a first network device to a first logical volume when the configuration information identifies that no data access to the first logical volume from the first network device is authorized.

As should be appreciated from the foregoing, O'Hare does not teach or suggest a storage system that comprises a filter that selectively forwards non-media access requests from a first network device to a first logical volume when configuration information identifies that no data access to the first logical volume from the first network device is authorized. Accordingly, it is respectfully requested that the rejection of claim 60 under 35 U.S.C. §102(e) be withdrawn.

Claims 61-66 depend from claim 60 and are patentable for at least the same reasons. Accordingly, it is respectfully requested that the rejection of claims 61-66 under 35 U.S.C. §102(e) be withdrawn.

CONCLUSION

In view of the foregoing remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
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